

Postprandial glycemia in cats fed a moderate carbohydrate meal persists for a median of 12 hours — female cats have higher peak glucose concentrations

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Abstract

The postprandial increase in glucose concentration is typically not considered in selecting diets to manage diabetic and pre-diabetic cats. This study describes increases in glucose and insulin concentrations in 24 clinically healthy, neutered adult cats following one meal (59 kcal/kg) of a **moderate carbohydrate diet (25% of energy)**. Median time to return to baseline after feeding for glucose was 12.2 h (1.8–≥24 h) and for insulin was 12.3 h (1.5–≥24 h). Time to return to baseline for glucose was not different between male (10.2 h) and female (17.2 h) cats. There was evidence female cats had a longer return to baseline for insulin (18.9 h versus 9.8 h) and females had higher (0.9 mmol/l difference) peak glucose than males. **This demonstrates that the duration of postprandial glycaemia in cats is markedly longer than in dogs and humans, and should be considered when managing diabetic and pre-diabetic cats.**